REMARKS

Claims 1-49 are in the case and presented for reconsideration. Claims 1, 11, 17, 21, 23, 27, 38, 44 and 48 have been amended. No new matter has been added.

Claim 1-49 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-77 of copending Application No. 10/313,702. Claims 1-49 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-17 of copending Application No. 10/173,298. Claims 1-49 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-27 of copending Application No. 10/173,197. Claims 1-49 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-22 of copending Application No. 10/173,339.

As set forth in MPEP § 804, "the doctrine of double patenting seeks to prevent the unjustified extension of patent exclusivity beyond the term of a patent." The Applicant would like to point out that the filing date of the present Application (Application No. 10/029,473) is December 21, 2001. Additionally, the Application would also like to point out that each of the copending patent applications used as a basis for the provisional rejection under the judicially created doctrine of obviousness-type double patenting of Claims 1-49 of the present Application (Application No. 10/029,473) have a filing date that is *after* the filing date for the present Application (Application No. 10/029,473). For example, copending Application No. 10/313,702 has a filing date of December 6, 2002. Copending Application No. 10/173,298 has a filing date of June 17, 2002. Copending Application No. 10/173,197 has a filing date of June 17, 2002. And, copending Application No. 10/173,339 has a filing date of June 17, 2002. Since each of these copending Applications have a later filing date than the filing date of the present application, it would not be possible for the present Application (Application No. 10/029,473) to have an unjustified extension of patent exclusivity beyond the term of a patent (when issued) based on it having the earliest filing date of December 21, 2001. Accordingly, these provisional double patenting rejections are not proper and should be withdrawn.

Claims 1-49 have been rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent 5,057,095 (Fabian) in view of U.S. Patent 6,073,043 (Schneider) and U.S. Patent 6,301,545 (Brodie).

With respect to the cited prior art references, Fabian is directed toward a surgical implement detector utilizing a resonant marker for detecting surgical implements in order to avoid problems of post-operative retention, i.e. in order to maintain a physical count of surgical implements that enter and exit a wound for purposes such as avoiding post-operative x-rays. Column 7, Lines 30-33 and Column 3, Lines 22-28.

Particularly, Fabian uses a marker 18 secured to a surgical implement 20 such as a sponge. Column 3, Lines 65-66. The marker 18 is comprised of an element that is in resonance at a certain preselected frequency within a range below 1 gigahertz. Additionally, three types of markers are described, for example, magnetomechanical, electromechanical and electromagnetic. Column 4, Lines 1-15. For the electromagnetic marker, energy is stored in an inductor and a capacitor through the use of an LRC circuit. Column 4, Lines 6-15. The LRC circuit (inductor, resistor and capacitor) is either in a series LRC circuit, or alternatively, a parallel LRC circuit or a printed circuit coil 66. Column 5, Lines 23-26.

It is important to note that Fabian does not in anyway teach or suggest a control circuit coupled to at least one sensor coil in order to generate an output signal indicative of the current in the at least one sensor coil. This is also acknowledged in the Examiner's remarks. Additionally, Fabian does not teach or suggest using a radio frequency (RF) driver for radiating a RF driving field toward the object. Moreover, Fabian does not in anyway teach or suggest the use of a power coil coupled to receive the RF driving field in order to convey electrical energy from the driving field to the control circuit and further couples to transmit the output signal generated by the control circuit as well as a signal receiver adapted to receive the output signal transmitted by the power coil in order to determine coordinates of the object in the body of the subject.

Schneider is directed toward a system and method for measuring position and orientation using magnetic field. Column 1, Lines 5-8. All configurations described in Schneider calculate a position and orientation solution based on an exact formula of the near field (or quasi-static) magnetic field coupling. Column 5, Lines 50-53. The relevant formulas or equations are listed throughout the disclosure. One embodiment of Schneider is directed toward a disposable sensor consisting of a single sensing coil 300 in the form of a flexible circuit board in various patterns. Column 27, Lines 43-61.

Likewise, Schneider does not in anyway teach or suggest a control circuit coupled to at least one sensor coil so as to generate an output signal indicative of current in the coil. Additionally, Schneider does not in anyway address the use of a RF driver for radiating an RF driving field toward the object. Nor does Schneider teach or suggest a power coil coupled to receive the RF drive field for conveying electrical energy from the driving field to the control circuit and for transmitting the output signal generated by the control circuit, nor a signal receiver adapted to receive the output signal transmitted by the power coil for determining coordinates or the object in the body of the subject.

Brodie is directed toward a global positioning system (GPS) using satellites to determine the position of an object. Column 1, Lines 11-15. The satellite controlled GPS system uses a transponder 14 having a power subsystem comprising an antennae switch 42, passive standby circuit 46, power supply control 48 and a solar powered charge controller 50. Column 6, Lines 12-15. The power supply control 48 is a metal oxide semiconductor field effect transistor (MOSFET). Column 6, Lines 20-23.

Since Brodie is directed toward GPS satellite systems, this reference clearly constitutes not analogous art. Even if one of ordinary skill in the medical device field were to be lead to this reference, it simply does not describe, suggest or even infer the novel combination of features and function of the Applicant's claimed present invention, for example, those features and functions outlined previously above.

Accordingly, based on the significant shortcomings in the teachings of each of these references when compared to the Applicant's claimed present invention, there is no motivation for one of ordinary skill in this field to combine these references in the manner suggested by the Examiner. Moreover, even if these references are combined in the manner suggested, this combination of references completely fails to achieve the novel combination of features and function of the Applicant's claimed present invention, namely, one or more field generators, RF driver, wireless transponder fixed to an object for use in the body of a subject wherein the wireless transponder comprises at least one sensor coil, a control circuit coupled to the at least one sensor coil in order to generate an output signal indicative of the current, and a power coil coupled to receive the RF driving field from the RF driver in order to convey electrical energy from a driving field to the control circuit and further coupled to transmit the output signal generated by the control circuit as well as a signal receiver adapted to receive the output signal transmitted by the power coil and to determine coordinates of the object in the body of the subject.

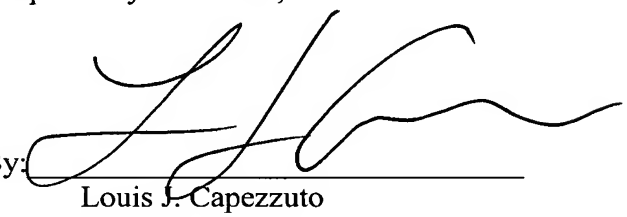
Moreover, this combination of references also fails to teach, suggest or even infer a wireless position transponder for operation inside a body of a subject comprising at least one sensor coil so that electrical current flows in the coil responsive to one or more electromagnetic fields applied to the body in a vicinity of the transponder, a voltage-to-frequency (VF) converter coupled the at least one sensor coil to generate an output signal with an output frequency that varies responsive to an amplitude of the electrical current flowing in the coil such that the output frequency is indicative of coordinates of the transponder inside the body and a power coil adapted to receive a RF driving field applied to the body in the vicinity of the transponder and coupled to convey electrical energy from the driving field to the control circuit and further coupled to transmit the output signal generated by the control circuit so that the signal can be received by processing circuitry outside the body for use in determining the coordinates of the object within the body (Claim 23).

Turning now to the Applicant's present invention, Claims 1, 11, 17, 21, 23, 27, 38, 44 and 48 have been amended in order to more particularly point out that the present invention is

directed toward an apparatus for tracking an object in a body of a subject or method for tracking an object in a body of a subject (Claims 27, 38, 44 and 48).

Accordingly, by this Amendment and for the reasons outlined above, the Applicant's claimed invention is both patentably distinct and non-obvious over the cited prior art references and favorable action is respectfully requested.

Respectfully submitted,



By: _____
Louis J. Capezzuto
Reg. No. 37,107

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933-7003
(732) 524-2218
Dated: June 17, 2004